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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/817,689	06/13/1997	GUY NATHAN	871-31	8565

23117 7590 12/17/2004

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EXAMINER	
KOENIG, ANDREW Y	

ART UNIT	PAPER NUMBER
2611	

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	08/817,689	NATHAN ET AL.	
	Examiner	Art Unit	
	Andrew Y Koenig	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 October 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 11-20 have been considered but are moot in view of the new ground(s) of rejection.

2. On page 6 of the response, the applicant traverses the Official Notice regarding the multitasking operating system. Accordingly, Ludwig has been introduced to teach this limitation (col. 4, ll. 55-58, col. 6, ll. 15-22, col. 18, ll. 44-52).

3. On page 8 of the response, the applicant traverses the Official Notice regarding the scheduling module. Ostrover, already of record teaches a microprocessor disk drive controller, which reads on a scheduling module by changing the data rate of the data for the operating system (col. 7, ll. 54-62), which feeds data into the video and audio buffers to avoid lack of data during audio and video reproduction

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,355,302 to Martin et al. in view of U.S. Patent 5,469,370 to Ostrover et al. U.S. Patent 5,689,641 to Ludwig et al., and U.S. Patent 5,521,922 to Fujinami et al.

Regarding claim 11, Martin teaches a payment-based jukebox, containing a microprocessor as 121a in figure 1 (col. 5, ll. 42-44). As shown in figure 1, jukebox #1 has a microprocessor (121a) that is linked to the coin/bill detector (126), which reads on the claimed payment device, and storage device (93) for storing audio and visual information (col. 5, ll. 8-15), a display (125), a digital audio reproduction device (126). Martin teaches a jukebox with a display; however, Martin fails to disclose a digital display. Official Notice is taken that a digital display is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin by using a digital display in order to enhance the visual quality of the images. Martin is silent on the type of operating system (OS) used in the jukebox. Ludwig teaches a multitasking operating system (col. 4, ll. 55-58, col. 6, ll. 15-22, col. 18, ll. 44-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin by incorporating a multitasking operating system as taught by Ludwig in order to manage multiple tasks thereby maximizing the processing power of the microprocessor. Martin teaches storing tools and services integrated into the storage means for operating the jukebox in the read only memory (ROM) of the jukebox (121B; col. 5, ll. 26-37). Official Notice is taken that storing software on a storage medium such as a hard disk or CD-ROM is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin by storing the software in a storage medium such as a hard disk or CD-ROM as taught in order to consolidate the storage of the information at a central location thereby enabling updates to the software.

Furthermore, video processing takes substantially more processing power than audio processing. Martin and Ostrover are silent on a display task having a higher priority than an audio signal. Fujinami teaches that video decoding has a higher priority over an audio decoding (col. 9, ll. 57-61, col. 10, ll. 14-21). Therefore, it would have been obvious to one of ordinary skill in the art to assign a higher priority to a video signal and a lower one to an audio signal as taught by Fujinami in order to efficiently process a video signal (which has more data than an audio signal). Martin fails to explicitly disclose using buffers. However, buffers are an inherent characteristic to multi-tasking operating systems. Despite Martin failing to teach a scheduler, a scheduler is an essential function of a multitask operating system. Ostrover teaches a microprocessor disk drive controller (fig. 2, label 27), demultiplexer (fig. 2, label 63), and audio and video buffers (fig. 2, labels 53 and 55, respectively). Further, Ostrover teaches placing data in the buffers, when the buffers are empty and a buffer full state when any of the buffers are full (col. 7, ll. 27-28, col. 7, ll. 42-47). Ostrover recognizes that if the buffers are being depleted of data too rapidly, that the rate at which the buffers fill is increased (col. 7, ll. 59-62). Ostrover teaches the microprocessor disk drive controller, which reads on a scheduling module by changing the data rate of the data for the operating system (col. 7, ll. 54-62), which feeds data into the video and audio buffers to avoid lack of data during audio and video reproduction. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin by using a scheduler and buffering data as taught by Ostrover in order to efficiently fill the buffers with data thereby enabling the display of audio and video information without

buffer under run and overrun problems. However, Martin and Ostrover are silent on transferring the information to the other by means of the operating system. Ludwig teaches buffering of the video is provided by the operating system, which as described above is a multitasking operating system (col. 32, ll. 27-36). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin and Ostrover by transferring information to buffers by the operating system as taught by Ludwig in order to guarantee a continuous flow of audio/video data (Ludwig: col. 32, ll. 35-36).

Regarding claim 12, Martin teaches a modem (label 19 in figure 1); this is connected to a transmission link (col. 3, ll. 26-32).

Regarding claim 13, Martin fails to teach a priority resolution module or a scheduling module. However, Official Notice is taken that the functions of a priority resolution module and a scheduling module are well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin by incorporating a priority resolution module in the multi-task environment in order to properly assign the correct priorities to the task thus providing a more robust design. As for the scheduling module, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin by using a scheduling module in the multi-task environment in order to maximize the available resources for use by other tasks.

Regarding claim 14, Martin fails to teach temporary buffers. Official Notice is taken that temporary buffers are well known in the art. Therefore, it would have been

obvious to one of ordinary skill in the art at the time the invention was made to modify Martin by using temporary buffers in order to communicate between task levels and improve robustness.

Regarding claim 15, Martin fails to teach a "manager." Official Notice is taken that a manager is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin by including a manager in order to handle any non-real time operations and maintain the system. Managing takes substantially less processing power than audio and video; therefore, it would have been obvious to assign the management module a lower priority.

6. Claims 16-17 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,355,302 to Martin et al., U.S. Patent 5,469,370 to Ostrover et al., U.S. Patent 5,689,641 to Ludwig et al., and U.S. Patent 5,521,922 to Fujinami et al. in view of U.S. Patent 5,481,509 to Knowles.

Regarding claim 16, Martin teaches a mass storage device for storing audiovisual information (col. 5, ll. 26-41), however Martin fails to show a hard drive. Knowles teaches using a hard drive to store audio and video information. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin by using a hard drive in order to easily swap the old hard drive with a new hard drive (col. 3, ll. 37-43). Official Notice is taken that storing an operating system on a hard drive is well known in the art. Therefore, it would have been obvious

to one of ordinary skill in the art at the time the invention was made to modify Martin by storing the operating system on the hard drive in order to obviating the need for a read-only-memory (ROM). Martin is silent on a status file including information relating to the insertion of money, addition of a selection to the queue, end of a selection and data allowing the system to return to a specified location in case of an interruption by a fault. However, Official Notice is taken that storing status information in hard disk is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin by storing information on a hard disk in order to provide to access information upon startup and put the player in a known state.

Regarding claim 17, Martin teaches a display (label 125, figure 1); however, Martin fails to teach a touch screen. Knowles teaches a touch screen and a video display (label 18, figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin by adding a touch screen and a video display as taught by Knowles in order to present the user with a menu including directions for operating the jukebox system (col. 4, ll. 7-11). Martin fails to show a control panel. Knowles teaches a control panel with at least control panels, see figure 5. Martin fails to show the first title selection panel. In figure 5, Knowles teaches the "touch the title of your choice" panel which reads on the first title selection panel to help customers find and select a desired title. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin by incorporating instructions in order to further facilitate the user in selecting

music. Martin fails to explicitly show a second management control panel. Clearly the function of the second management control panel is taught by Martin; the jukebox as disclosed would have a volume control. Martin teaches the use of a database in the central management system (label 11, figure 1), but fails to teach a database at the user location. Knowles teaches the use of a database in a jukebox (col. 7, ll. 16-22); scanning is an inherent characteristic of databases. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin by using a database as taught by Knowles in order to scan for songs to simplify the searching process, thereby aiding the user in finding music. Martin fails to teach a fourth statistics panel, for statistical estimation. However, Knowles teaches storing statistical information regarding the played tracks (col. 7, ll. 16-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin by gathering statistical information of the songs as taught by Knowles in order to pay royalties and obtain additional operator information.

7. Claims 18-19 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,355,302 to Martin et al., U.S. Patent 5,469,370 to Ostrover et al., U.S. Patent 5,689,641 to Ludwig et al., and U.S. Patent 5,521,922 to Fujinami et al. in view of U.S. Patent 5,282,028 to Johnson et al.

Regarding claim 18, Martin fails to teach a remote control. Johnson teaches a remote control with a volume control (label 200, figure 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to

modify Martin by using a remote control with volume control in order to adjust the volume of the jukebox thereby giving more audio control to the user.

Regarding claim 19, Martin fails to teach storing "system operating parameters in a file," which is unable to be read by the user. Official Notice is taken that hiding system files is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin by hiding system files in order to create a robust and secure system from abuse.

8. Claim 20 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,355,302 to Martin et al., U.S. Patent 5,469,370 to Ostrover et al., U.S. Patent 5,689,641 to Ludwig et al., U.S. Patent 5,521,922 to Fujinami et al., and U.S. Patent 5,282,028 to Johnson et al in view of U.S, Patent 5,481,509 to Knowles.

Regarding claim 20, Martin fails to teach fixing a price for a title. Official Notice that fixing a price for a title is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin by charging a user for playing a song in order to maximize revenue. Martin fails to teach an inactivity delay before starting a visual promotion and an auxiliary source. Knowles teaches playing a commercial during a delay (label 182, figure 4C), which reads on a visual promotion and an auxiliary source (col. 7, ll. 34-57). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin by playing a commercial as taught by Knowles in order to keep the jukebox active.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Y Koenig whose telephone number is (703) 306-0399. The examiner can normally be reached on M-Th (7:30 - 6:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ayk

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PRIMARY EXAMINER